Marine Aviation Plans & Programs Reference Guide

DC Aviation
LtGen M. A. Hough

April 2005

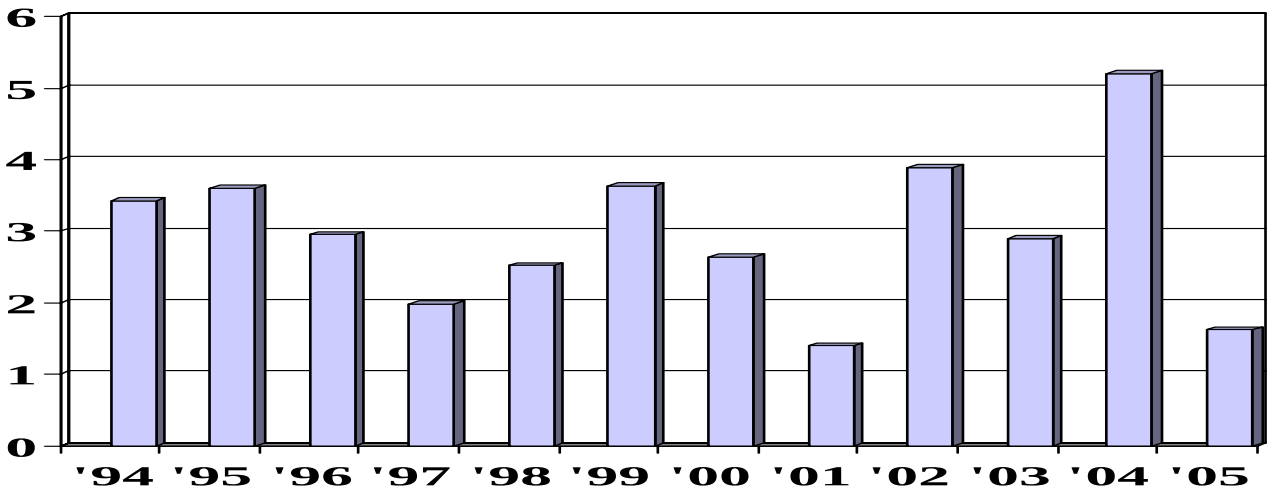
Table of Contents

This ***Marine Aviation Plans & Programs Reference Guide*** is produced by the HQMC Department of Aviation and provides a brief overview of Marine Aviation Programs. The budget information in this booklet reflects Presidential Budget 2006 (PB06). More detailed information on the entire Marine Aviation Program, including aircraft transition plans, can be found in the HQMC Aviation Department's ***Aviation Plan (AVPLAN).*** The most recent AVPLAN was released in April 2005.

Safety

11-Apr-05	This FY-To Date				Last FY-To Date				Last 12 Months			
	A	RATE	B	RATE	A	RATE	B	RATE	A	RATE	B	RATE
All Marine	3	1.62	1	0.54	8	4.78	3	1.79	13	3.56	2	0.55
Fighter/Atk	2	2.69	1	1.34	3	4.29	2	2.86	8	5.49	1	0.69
R/W	1	1.14	0	0.00	4	5.38	0	0.00	5	2.87	1	0.57

Marine Aviation Class A Mishap Rate FY94-FY05



FY05 Class A Mishaps

- 12/01/2004, AV-8B
- 01/13/2005, AV-8B
- 01/26/2005, CH-53E

Primary Aircraft Authorized (PAA)

		Unit	Active		Unit	Reserve		
	T/M/S	PMAA	Squadrons	PMAA	PMAA	Squadrons	PMAA	PMAA Total
HMLA	AH-1W	18	6	108	18	2	36	144
	UH-1N	9		54	9		18	72
HMM	CH-46E	12	14	168	12	2	24	192
HMH	CH-53D	8	3	24				24
	CH-53E	16	6	96	8	2	16	112
Total RW PMAA			**29**	**450**		**6**	**94**	**544**
VMA	AV-8B	16	7	112				112
VMFA	FA-18A/A+	10	2	20	12	3	36	56
	FA-18C	10	3	30				30
	FA-18C	12	3	36				36
VMFA(AW)	FA-18D	12	6	72				72
VMAQ	EA-6B	5	4	20				20
VMGR	KC-130F/R/J	12	3	36				36
	KC-130T				12	2	24	24
Total FW PMAA			**28**	**326**		**5**	**60**	**386**
Total PMAA			**57**	**776**		**11**	**154**	**930**
HMT-303	AH-1W	20	1	20				20
	UH-1N	10		10				10
	HH-1N	4		4				4
HMM(T)-164	CH-46E	18	1	18				18
HMT-301	CH-53D	6	1	6				6
HMT-302	CH-53E	15	1	15				15
VMMT-204	V-22A	12	1	12				12
VMAT-203	AV-8B	14	1	14				14
	TAV-8B	14		14				14
VMGRT -253	KC-130F/R	6	1	6				6
VMFAT-101	FA-18B	4	1	4				4
	FA-18C	16		16				16
	FA-18D	17		17				17
VMFT-401	F-5E/F				13	1	13	13
HMX-1	VH-3	11	1	11				11
	VH-60	8		8				8
	CH-46E	6		6				6
	CH-53E	6		6				6
OSA	C-9B			2				2
	UC-35C/D			8			2	10
	C-20G			1				1
	UC-12B/F	14		14			3	17
SAR	HH-46D	3	1	3				3
	HH-1N	3	1	3				3
Total Training/Support			**11**	**218**		**1**	**18**	**236**
Totals			**68**	**994**		**12**	**172**	**1166**

Active Laydown

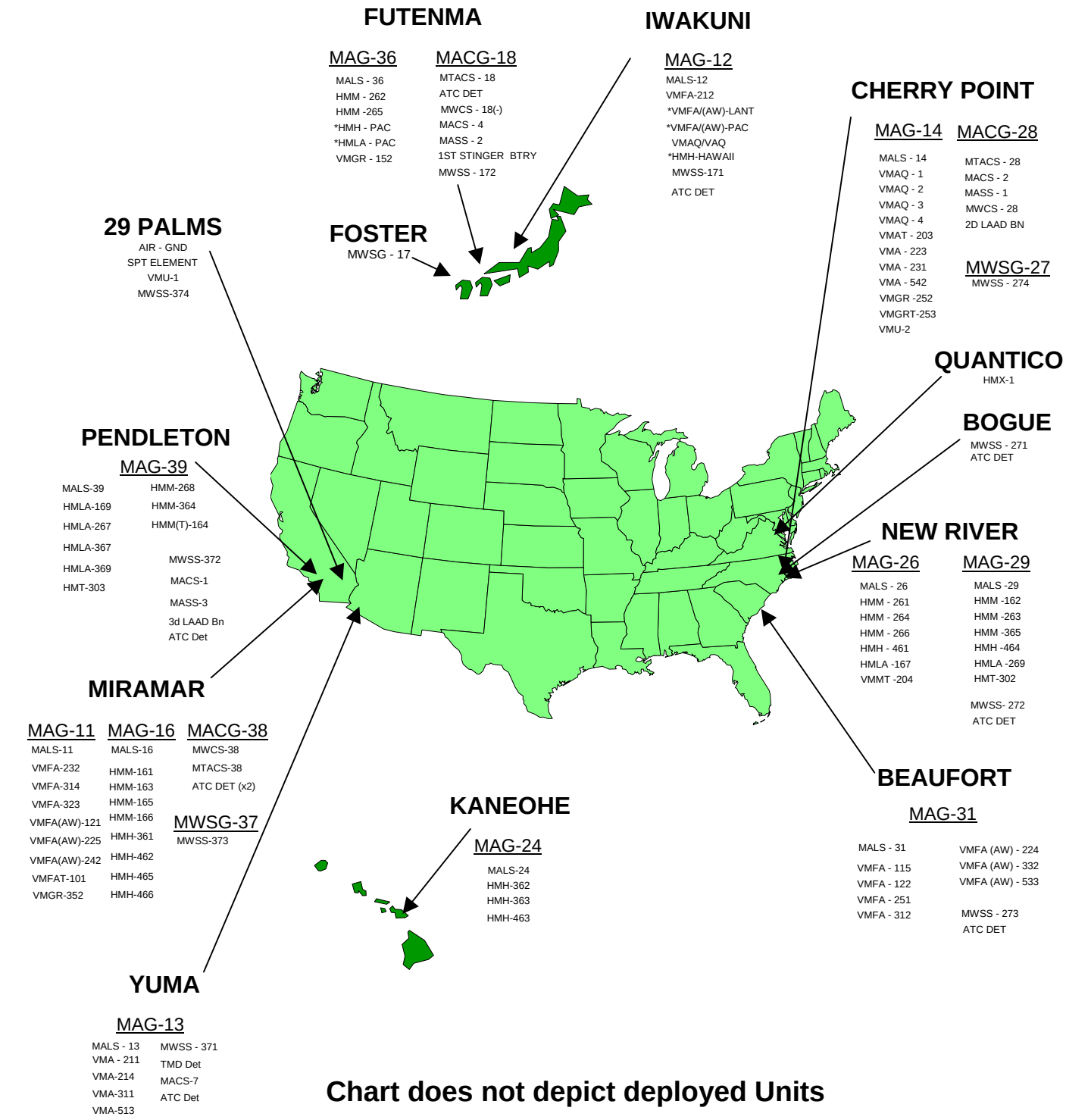
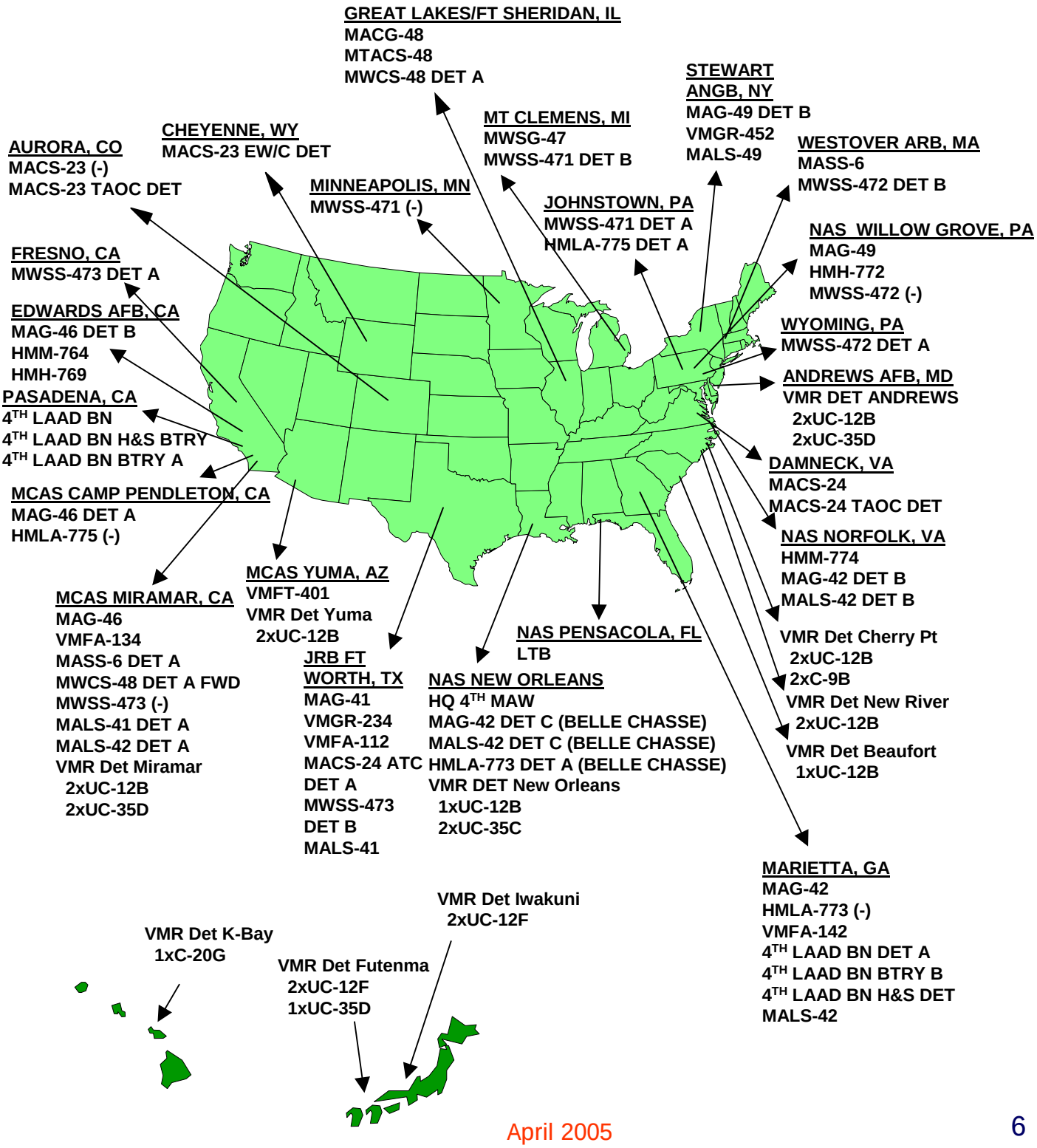


Chart does not depict deployed Units

*DENOTES PAC/LANT UDP SQUADRONS

Reserve Laydown



Flying Hour Program

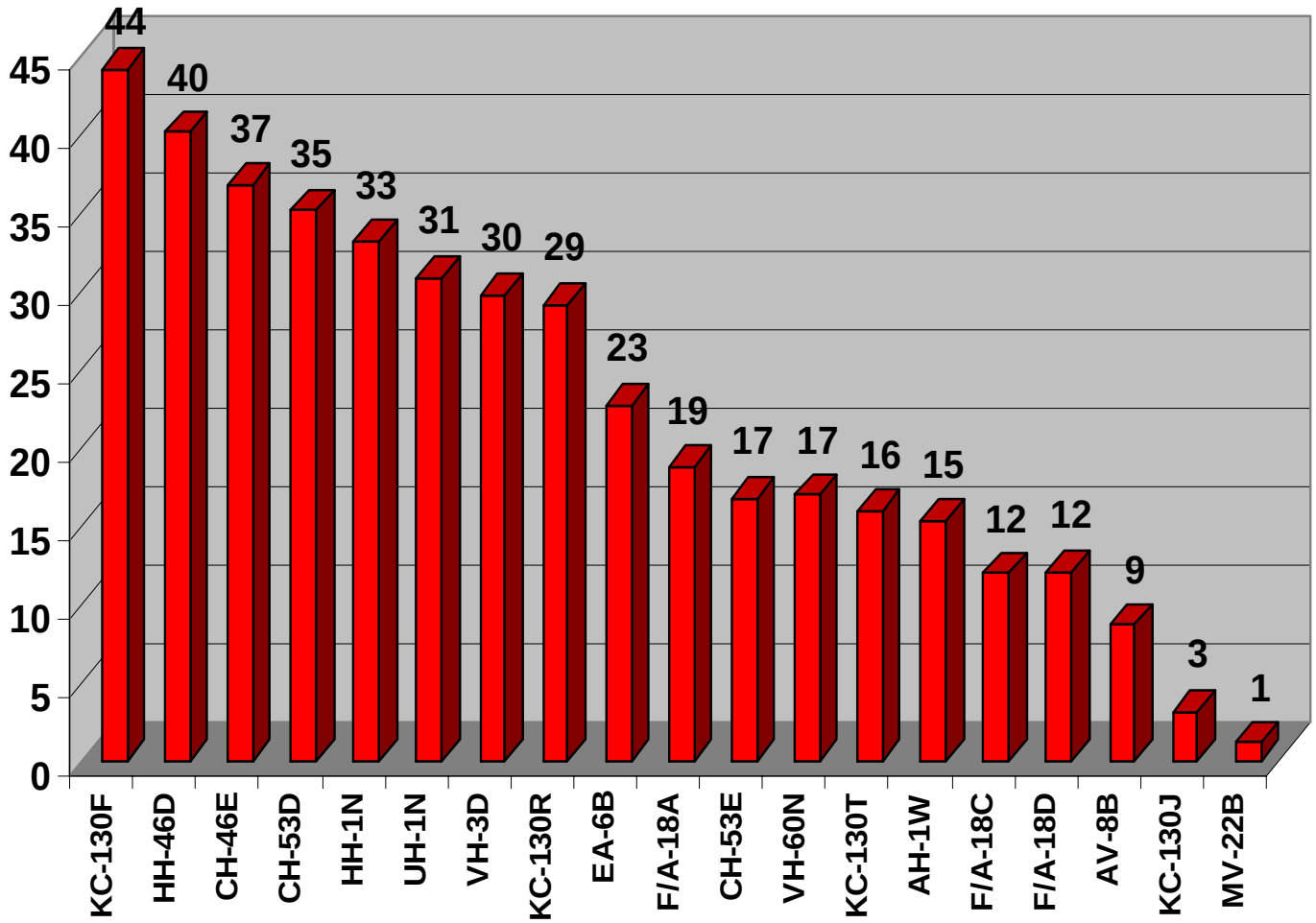
- **Standardized Reporting**
  - Official reporting for 2Q04
  - NAVAIR TMR data documents training, support, ops hours
  - DC/A analysis supports future FHP programming decisions
- **T&R Program Manual update**
  - Interim published 9 Jan 04
  - Provides template for flight hour modeling and T-Level reporting
- **Unit Core Competency Readiness Model validation**
  - Validation of TACAIR models complete
  - Critical milestone to linking T&R, FHP, and readiness reporting
- **Revised FHP Order (MCO 3125.1A)**
  - Standardizes FHP management
  - ACMC signed; released Apr 05
- **POM-06 FHP**
  - FY06 TACAIR requirement set at 212,986 hours
  - FHP model validated; accreditation in progress
- **T-Level Readiness Reporting**
  - Concept approved by DC/A
  - SORTS T-Level based on number of core skill proficient crews vice average CRP
  - FHP resourced to T 2.0
  - SORTS revision in work by DC/A & ATB (ECD TBD)

	Requirement*	Budgeted**	% Reqt Budg	Executed***	% Reqt Exec	% Budg Exec
FY97	346,977	276,108	80%	215,866	62%	78%
FY98	292,919	239,100	82%	218,182	74%	91%
FY99	256,592	220,859	86%	223,424	87%	101%
FY00	250,352	219,279	88%	207,295	83%	95%
FY01	249,728	196,403	79%	215,620	86%	110%
FY02	248,416	220,298	89%	238,456	96%	108%
FY03	247,301	219,191	89%	243,556	98%	111%
FY04	217,797	211,111	97%	223,632	103%	106%
FY05*	215,123	210,582	98%	89,362	42%	42%
FY06**	212,986	208,607	98%			

**FY97 – FY03 requirement from MACP*
**FY04-FY06 requirement from Core Model Minimum Requirement*
***FY06 budget data from BES OP-20 version 1656*
****FY05 Execution data through 31 January 2005*

Average Aircraft Age

Jan 2005 AIRRS Data



CH-46E

Aircraft	
PAA (APDF, 30Aug04)	217
BAA	252
RQMT	248
Inventory (12/04)	224

Program Update:

- ERIP: re-cores T-58 engines, restores spec power
  - Completes in FY08
- Lightweight Armor & Seats
  - Armor replacement restores 260 lbs of lift
  - Lt Wt Seats (200 lb savings) BTR in progress with Electrical OSIP funds for a new start program in FY-05

New OSIPs:

- 11-05 Lightweight Replacement Armored Seats (New Start Program – funded subsequent to PB-06)

ASE Status (A Kit / P Kit)			
System	Funded	Installed	Un-funded
AAR-47	196 / 192	140	4
ALE-47	196 / 192	140	4
ALQ-157	218	96	0

PB-06 (Feb 05, $M)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
APN-5							
Safety Improvements	1.9	3.7	2.8	1.2			
Engine Control System	2.1	0.1					
Electical Upgrade	2.6	3.5	3.3	1.4			
Eng Reliability Imprvmt Prog (ERIP)	56.4	41.1	40.3	3.9			
Aircraft Integrated Maintenance System (AIMS)	6.6	7.0	1.1				
Total MODS	**71.2**	**55.4**	**47.5**	**6.5**	**0.0**	**0.0**	**0.0**

CH-53D

Aircraft	
PAA	30
BAA	4
RQMT	36
Inventory (12/04)	35

Program Update:

- HMT-301 Stand-down July 2005
- Stand-down of remainder tied to V-22 Fielding

OSIPs:

- Running Engine Wash

Issues:

- Sustainment Plan in work
- Wind envelope testing

ASE Status (A Kit / P Kit)			
System	Funded	Installed	Un-funded
AAR-47	35 / 35	7	0
ALE-47	35 / 35	8	0

MV-22

IOC: JORD Chg 4 - FY07
- 12 A/C in 1st VMM with Logistics

FOC: FY18

Procurement Objective: 360

Program Update:
- ORD Chg 4 Approved
  - JROCM, 20 July 04
- PBD-753 (23 Dec 04) re-phased 22 aircraft outside the FDYP
- OPEVAL started March 05
- Block A aircraft being delivered to VMX-22

Test Status:
- ITT more than 2064.4 hrs since 29 May 02 return to flight
- VMX-22 more than 2784.9 hrs since Nov 03

Working Issues:
- Block C configuration and funding in PB06
- Blk B Ramp Gun (defensive weapon system)
- OPEVAL/MSIII Preparation

PBD-753
- Cut 22 acft ($1.25B) in FYDP
- Won't attain PMAA until FY16 vs. FY11; sqdns w/9 acft (vs. 12)

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N						
Total RDT&E	206.4	266.2	93.5	25.1	22.2	1.8
APN						
QUANTITY	9	14	19	30	35	38
NET P-1	993.3	1423.2	1596.0	2169.1	2358.8	2398.5
ADV PROC	67.3	171.6	218.5	178.6	119.1	129.5
SPARES	157.3	6.7	2.4	2.7	2.9	3.2
MODS	81.0	85.6	46.8	25.1	25.6	26.1

MV-22 TTF

CFT 1 (DOCTRINE & TRAINING)

- Squadron selection and sequencing (on-going)
- Joint training MOA with CNATRA/AETC/TECOM (May 05)
- 2D MAW transition order-cost specific (Apr 05)
- Maturation phase refinement (May 05)
- Phase III (1st sqdn deployment-completion of MCAS NR transition) (Nov 05)

CFT 2 (ORGANIZATION & PERSONNEL)

- Transition conversion board (Jun 05)
- School seat/staffing alignment (May 05)
- Phase III (1st sqdn deployment-completion of MCAS NR transition) (Nov 05)

CFT 3 (MATERIAL & FACILITIES)

- VMMT-204 Maintenance Training Division (MTD) support (May 05)
- OPNAVINST 1540 (May 05)
- Environmental- 3D MAW EIS (Dec 05)
- Phase III (1st sqdn deployment-completion of MCAS NR transition) (Nov 05)

MV-22 CHARTER: 01 Oct 03

TTF Dates

LAST: 02 Nov 04

NEXT: 10 May 05

TTF FY 04 DECISION POINTS

- Squadron selection and sequencing (on-going)

CH-53E

Aircraft	
PAA	135
BAA	23
RQMT	164
Inventory (12/04)	147

Program Update:

- Engine reliability #1 degrader
  - FY03/04 Supplemental
  - FY05 Congressional Add ($40M)
  - FY06 issue

FY05 Congressional Plus up:

- T-64: $40M
- IMDS: $8.6M.
- CDWS: $7.7M.
- HNVS: $2.2M NGRE

ASE Status (A Kit / P Kit)			
System	Funded	Installed	Un-funded
AAR-47	100	48	49
ALE-47	149	48	0
Int. Armor	149 / 60	51	0

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N ($M)						
Legacy RDT&E	2.5	2.5	2.5	2.6	2.6	2.7
APN-5 ($M)						
T-64 ERIP	8.8	9.1	15.2	10.7	10.6	10.6
H-53 Sustainment	1.1	12.5	15.9	12.6	11.6	11.6
IMDS	1.3	1.3	2.3	1.3	1.3	3.4
Engine Nacelles	3.0	2.2	2.0	0.0	0.0	
HNVS TFUs	0.6	0.6	0.6	0.7	2.3	2.0

Heavy Lift Replacement

IOC: FY15

FOC: FY21

Procurement Objective: 156

Program Update:

- 53E Fatigue Life is driver
  - 6120 hrs: Pylon Fold Bulkhead
- STOM & Seabasing Enabler
  - CNA Marine Aviation Requirements Study
    - Heavy Lift Shortfall
  - MCCDC Assault Support Requirements Analysis
  - 2015 Baseline MEB
- Key Performance Parameters
  - 27K / 110
  - Survivability
  - Logistics footprint
  - Interoperability
  - Mission Reliability= .89
  - Sortie Generation Rate = 2.6
- AoA Sep '03—New Build
- MROC approval Nov '03
- JROC Approval Dec 04
- MS B DAB Aug 05 (est.)
- PMA-261 in pre-development efforts
  - Baseline Configuration
  - Risk Assessment
  - Engine Competition
  - Avionics baseline & competition
  - Technology Maturation
    - Gearbox
    - Rotor blade
    - Rotorhead damper
  - CAIV, Cost activities

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N						
53X / HLR	269.4	296.1	336.1	346.6	364.5	359.1

UH-1N

Aircraft	
PAA	83
BAA	10
RQMT	99
Inventory (12/04)	87

Program Update:

- BRITE Star (AN/AAQ-22D) (Congressional Funding)
  - 3rd Generation FLIR
  - Laser Designator
  - PB 05 (10 systems)

Issues:

- GAU-17 4400 Round Ammo Can ($1.26M)
  - Current Dillon cans do not meet 20/20/10 criteria
  - 140 to be modified by NSWC Crane
  - 6 month turnaround (preliminary schedule)

ASE Status			
System	Funded	Installed	Un-funded
AAR-47	80	45	9
ALE-47	80	45	9

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
APN-5						
UH-1 NTIS	7.2	7.2	5.8	7.4	7.5	7.7
H-1N Safety Upgrades	0.2	0.2	0.2	0.2	0.3	0.3
Total MODS	7.4	7.4	6.0	7.6	7.8	8.0

AH-1W

Aircraft	
PAA	168
BAA	20
RQMT	197
Inventory (12/04)	175

Program Update:

- NTS Upgrade (Congressional Funding)
  - Upgrades the AH-1W Night Targeting System in 36 aircraft, plus 4 spares.
  - Gen III FLIR, Improved Boresight
  - FY05 $3.5M plus-up
- Turned Exhaust (Congressional Funding)
  - On Contract for 60 systems
  - Prototype delivery Mid- Sept
  - 1st Article (TOW Blast Compatible) Mar 1st 05
  - Deliveries begin 1 April 05 (5 per month)
- NTSU
  - Schedule delays
  - Prototype delivery slipped from Sep 28 to Feb 14 due to hardware/software delivery and developmental issues

OSIPs:

- 8-90 AH-1 Night Targeting System
- 16-98 AH-1W APR-39A(V)2
- 12-00 H-1 Mission Planning Module and OFP Software Upgrade Program
- 13-00 AH-1W Aircraft and T700 Engine Safety Corrections
- 02-03 AH-1 20MM Linkless Feed

ASE Status			
System	Funded	Installed	Un-funded
AFC-230(A)	162	78	18
AAR-47	162	78	18
ALE-47	162	78	18
Turned Exst	60	0	0
IR Supp	46	32	0

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
APN-5						
Acft & T700 Safety	1.3					
20mm Linkless Feed	6.4	1.6	1.6	1.7	1.7	1.8
Total	7.7	1.6	1.6	1.7	1.7	1.8

UH-1Y/AH-1Z

IOC: FY08 (Y) / FY11 (Z)

(3) UH Det with trained crews

(6) AH Det with trained crews

FOC: UH FY13

AH FY17

Procurement Objective:

100 UH / 180 AH

Program Update:

- **5 EMD aircraft flying at PAX River**
  - OPEVAL begins in Jul 2005

Issues:

- **Tailboom Heating**
  - –Turned Exhaust currently installed on all EMD aircraft
- **Y Build New (partially funded)**
  - –$37.4M total cost over FYDP
    - –$14.4M NRE
    - –$10.8M GFE
    - –$180K recurring
- **Z Build New (un-funded)**
  - –Procures AH-1Zs to reduce the impact to the fleet, avoiding unacceptably low inventory levels
  - –$50.0M NRE
  - –Recurring cost TBD

PB-06 (FEB 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N						
	42.0	7.7	3.6	3.7	3.8	3.9
APN						
A/C Quantities	10	18	21	21	22	23
APN-1	337.7	431.9	467.2	454.6	463.7	472.9
Spares	31.4	48.4	85.4			
Total Procurement	**369.1**	**480.3**	**552.6**	**454.6**	**463.7**	**472.9**

UH-1Y/AH-1Z TTF

TTF Charter: 01 Oct 03

TTF Conference:

- **Last: Feb 05**
- **Next: Jul 05**

CFT I: Doctrine & Training (APP)

- T&R Manual
  - Draft w/ comments to ATB (Feb 05)
- Training Support Critical Path (Jul 05)
  - CRM/Mission Planning Tools
  - HQMC(APP) coord w/ PMA's
- FRS TIP Validation (Mar 05)

CFT II: Organization & Personnel (ASM)

- OT&E Consolidation at VX-9
  - Fwd Staffing begins FY05
- HMT-303 Manpower Reqt (Mar 05)
  - Legacy Conversion Manning
  - Navy Divestiture & Increased PTR
- FIT Staffing
  - Began Dec 04
- RILSD GEO Location Shift
  - TOCR (Feb 05)
- ATS Manning
  - FY06 Stand-up
  - TOCR (Feb 05)

CFT III: Material & Facilities (ASL)

- MCAS CamPen Site Survey (Mar 05)
- O- Level Maint Pub Verification
  - HMT-303 will conduct
  - COA and MOA due Mar 05
- HMSD Support Plan (Mar 05)
  - NAVICP and APML FORAC
- TYCOM Induction Plan
  - GFE Inductions (Mar 05)
  - UH Star SAFIRE Inductions (Mar 05)

Upcoming TTF Decision Points:

- None

Environmental Impact Statement Update

- 3d MAW—PMA to conduct particulate matter testing for –401C emissions May 05
- 2d MAW—FY10

AV-8B

Aircraft	
PAA	131
BAA	11
RQMT	163
Inventory (12/04)	125

Program Update:

- OSCAR Status
  - IOC complete
  - FOC 2010
- Litening Pod Status
  - 96 Pods Delivered
  - 28 video downlink mods in progress
- IMP Issues
  - FY06 PAA Reduction to 14 creates IMP pipeline
  - Req'd to extend service life of fleet to 6000 hrs
  - Pylons, flaps, vertical stab, aft fuselage.

ASE Status (A Kit / P Kit)			
System	Funded	Installed	Un-funded
ALE-47	24 / 24	0	108

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N						
Total	15.6	13.9	12.7	16.5	12.6	12.7
APN-1						
Total	1.7					
APN-5						
Open Sys Core Avionic Archtctr	28.5	9.2	8.6	8.0	4.5	1.2
Eng Life Mgmt Plan	3.1	3.7	2.7	3.9	4.0	3.0
Readiness Mgmt Plan	3.3	7.6	6.8	13.6	8.9	13.4
Total Mods	34.9	20.5	18.1	25.5	17.4	17.6

F/A-18A+/C/D

Aircraft (A+,B,C,D)	
PAA	236
BAA	31
RQMT	284
Inventory (12/04)	256

Program Update:

- ECP-583
  - Upgrades F/A-18A and C avionics to F/A-18C LOT 17
  - 40 active & 36 reserve aircraft require modification
  - 76 aircraft currently funded
  - 45 completed
  - Cost of 4.6M per aircraft w/o MIDS / 6.0M w/MIDS
- F/A-18D
  - Litening Pods
    - FY-05 plus up of $3M
  - ATARS Solid State Recorders
    - FY-05 plus up of $4.3M
- Center Barrel Replacement

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N						
Total	88.7	21.0	13.6	10.5	10.7	10.9
APN-5						
ATARS	7.8					
Digital Communication System	3.4	2.5	1.8	1.5	1.4	1.4
SLMP (SLAP) (SLEP/CBR+)	86.7	111.6	114.0	115.4	123.3	124.8
MIDS (LINK-16)	39.6	46.2	48.1	49.2	28.4	21.3
ECP-583	35.0	33.1	10.7	9.4	33.4	40.2
JHMCS	37.1	39.1	36.9	40.8	40.0	40.1
ATFLIR	128.9	150.0	149.1	153.4	24.4	24.6
Digital Wing Tip (AIM-9X)	0.2	0.2	0.2	0.5	0.3	0.5
Core avionics improvements	3.5	3.8	2.8	3.0	6.1	6.3
Link 4A Replacement	4.5	4.7	9.7	10.7	11.1	7.4
C/D Training System	7.7	6.8	7.0	7.1	7.0	13.0
Total Mods	354.4	398.0	380.3		275.4	279.6

JSF

IOC: 2012

• 1st Sqdn (10 A/C) Ready to Deploy

FOC: 2024

Procurement Obj: 420

ORD Status:

- Updated Dec 04.

Program Update:

- SDD phase extended to 2013.
- Sep 04 Services selected the configuration that best ensures STOVL viability.
- Oct 04 STOVL optimized design approved by Defense Acquisition Board (DAB).
- SDD replan to be completed in Apr 05.

Program Update (con't):

- STOVL Ground Rules & Assumptions (GR&A) refined to better reflect actual operating conditions.
- GR&A changes included: Optimized mission profile to HI-HI-HI, revised landing pattern in line with UK landing pattern, improved hover to weight ratio.
- Weight management plan now in place to ensure STOVL meets all Key Performance Parameters.
- Basing and Ship Suitability (BASS) efforts continuing for introduction of JSF aboard CVN and LHD class shipping and eventually the LHA(R).

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N ($M)						
Total	2402.1	2295.8	1958.1	1531.6	1220.2	761.8
APN ($M)						
APN-1	0.0	247.2	1957.5	4483.6	4350.7	3584.4
APN-6	65.8	20.5	136.3	329.8	340.1	317.1
Aircraft						
DoN	0	0	10	32	36	33

JSF TTF

TTF Charter: 01 Oct 03

TTF Conference:

- Last: April 01
- Next: TBD

CFT I: Doctrine & Training (APP)

- Instructional System Design (Began Feb 2004)
- Publish F-35B T&R MCO (Apr 09)
- Initial Training Center Ready-for Train (Training) (Apr 09)

CFT II: Organization & Personnel (ASM)

- F-35B T/O approved by TFS (Apr 08)
- 2015 MEU ACE Composition (Evolving)
- USMC Instructors arrive at ITC Site(s) (Apr 09)

CFT III: Material & Facilities (ASL)

- F-35B STOVL JSF Rollout (Jun 06)
- BRAC Commission makes ITC Site Selection (May 05)
- Congress BRAC Approval (Dec 05)
- F-35B STOVL First Flight (Jun 07)
- Initial Training Center Ready-for Train (Facility) (Apr 09)

Upcoming TTF Decision Points:

- None critical

Environmental Impact Statement Update

- Awaiting BRAC 05 decision

KC-130F/R/T

Aircraft (F,R,T)	
PAA	58
BAA	11
RQMT	67
Inventory (12/04)	62

Program Update:

- **Avionics Modernization Program (AMP) Funding**
  - Modifies (28) KC-130T Aircraft in 4th MAW to meet CNS/ATM mandates and solve avionics and DECM obsolescence issues
  - Shortfall of $12.8M through FYDP
  - $208.4M shortfall begins in FY12

OSIPS:

- 13-04 KC-130 AMP
- 02-92 ARC-210

Other Mods:

- TCAS – 4 to complete in FY05
- APR-39A(V2) – complete
- LOX Mod – complete
- GAS-1 – complete

ASE (DECM) Status			
System	Funded	Installed	Un-funded
AAR-47	20	20	5
ALE-47	20	20	5
ALQ-157	20	6	0

• FY05 Supplemental request for "ground-up" DECM modifications for additional (5) KC-130T aircraft (to complete remaining 5 of 13 NVL-modified KC-130T's).

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
APN-5						
AN/ARC-210	0.6					
Avionics Modernization Program	39.7	48.7	38.9	37.8	45.5	42.8
Total Mods	40.3	48.7	38.9			42.8

KC-130J

Aircraft (J only)	
PAA	13
BAA	1
RQMT	14
Inventory (12/04)	13

- **IOC: Feb 05**
  - 1st Squadron (12 acft) capable of supporting deployed MEU and/or GWOT
- **FOC: FY08**
  - Pre-PBD-753: Last squadron complete with 12 aircraft delivered
  - PBD-753 executed as drafted:
    - 33 KC-130J aircraft delivered
- **Procurement Objective: 51**
- **Program Update:**
  - 1st 13 aircraft via Congressional Add FY97-FY02
  - MYP I signed in FY03 was to have provided 20 KC-130Js on contract FY03-FY08
  - PBD-753 terminated C-130J/KC-130J contract in FY06.

- **Test Status:**
  - OTIIIA/B Oct-Dec 03 completed
    - Report published in Mar 04
    - Suitable and effective in permissive environment
  - OTIIIC Phase 1 (DECM)
    - Testing complete Sep 04
    - Report published Feb 05
    - Effective in in permissive & non-permissive environments
  - OTIIIC Phase 2
    - AR Phase II Pod
    - Scheduled for testing June 05

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
APN						
APN-4 A/C+Adv Proc	1092.7	12.7	14.7			
APN-6 Spares	32.0	7.6	19.5	0.5	0.5	0.5
Total	1124.7	20.3	34.3	0.5	0.5	0.5
Quantity	12					

KC-130J TTF

TTF Charter: 01 Oct 03
TTF Conference
- **Last:** Mar05
- **Next:** TBD

CFT I: Doctrine & Training (APP)
- KC-130J Pre-JMATS Aircrew Conversion Training
- Post FRS closure Legacy Training and Model Manager duties
- KC-130J TACMAN Supplement

CFT II: Organization & Personnel (ASM)
- KC-130 FRS manpower redistribution
- KC-130J Personnel Stabilization
- KJ T/O in effect @ 3dMAW (Oct 05)

CFT III: Material & Facilities (ASL)
- Upgraded AR pod installs complete by Jul 05
- MCAS Miramar KC-130J Simulator and Classroom Contract Award (Jan 05)

Upcoming TTF Decision Points:
- Pre-JMATS KC-130J conversion training way forward (TBD)
- USAF F/E training suitability recommendation TBD)
- JMATS Large Group Tryout After Action (Jan 05)

Environmental Impact Statement Update
- 2d MAW—Complete Sep 00
- 3d MAW—Complete Feb 03
- 1st MAW—Sched Sep 06

EA-6B

Aircraft	
PAA	20
BAA	5
RQMT	26
Inventory (12/04)	21

Program Update:

- Engine Replacement
  - Recovery—sufficient spares in system
  - PMA working to improve on-wing reliability to spec— goal of 800 hrs on-wing time, presently 480 hrs
- ICAP III
  - Receiver Upgrade provides new geo-location & reactive assignment capability
  - USQ-113 Comm Jammer integrated with displays
  - Improved Connectivity via MIDS
  - Operations & Support Savings
  - Distribution impacted by reduced buy
- AEA AoA
  - Completed Dec '01
  - DoD EW Roadmap in work
  - USMC EW Roadmap in work
- Wing Fatigue / Inventory:
  - 31 Oct 03 'Redstripe': DoN Inventory reduced to 71 acft
  - Based on WCS installs, back up to 84 acft as of Oct 04 -- on track for 95 acft by Oct 05
  - FLE-related issues are funded and on track
- EA-JSF Analysis Study
  - Final report expected Spring 2006

PB-06 (Feb05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
APN-5						
ALQ-99 PODS	11.2	14.5	14.3	18.2	18.8	19.3
EA-6B Structual Improvements	43.8	23.2	8.7	0.1		
J-52 Engines	0.3					
EA-6B Block 89A Avionics	1.6					
ICAP III*	8.3					
MIDS	1.3					
Total Mods	66.5	37.7	23.0	18.3	18.8	19.3

UAVs

Program Update:

- **Pioneer**
  - Deployed VMU averaging 400 flight hours per month supporting OIF
  - Sustainment program concentrating on
    - Tactical Relevancy
    - Obsolescence Issues
    - Logistics Footprint
  - Continue to submit supplemental requests to cover OIF costs

Interim UAV

- Eagle Eye tilt-rotor UAV (USCG POR)
- IOC FY09

Vertical UAV (VUAV)

- Support breadth and depth of EMW and Sea Power 21
- ICD: JROC staffing
- CONOPS approved Jul 04
- CDD in development
- Concentrating on
  - Reliability
  - Responsiveness
  - Maintainability
  - Survivability
  - Interoperability

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
Eagle Eye Quantity	1	2	2	3		
RDT&E,N VUAV (Eagle Eye)	9.2	8.0	8.1	1.1		
VUAV APN-4		12.9	15.1	17.2		
Total	9.2	20.9	23.3	18.3	0.0	0.0
WPN (Pioneer)	2.0	2.0	2.0	2.1		

Presidential Helo

VH-3D/VH-60N

- VH-3D SLEP (completed FY02)
  - Increased service life from 10K to 14K hrs
- VH-60N Midlife Upgrade (completed FY02)
  - Upgraded avionics & airframe structure
- VH-3D/60N Survivability (complete FY05)
  - Survivability Suite
  - VH-3D TCAS
  - VH-3D/60N Simulators
  - VH-60N Maintenance Trainer
  - MAGR 2000 GPS
  - TACAN Replacement
- VH-3D Lift Improvement (Carson blades)
  - Funded for FY07
  - FOC FY08
- VH-3D/60N Comm Suite Upgrade (complete FY09)
  - DAMA SATCOM
  - Digital FM 1&2
  - OTAR (DAMA SATCOM & Dig. FM1/2)
  - HF/ALE
  - Data Transfer Computer (VH-60N)
- VH-60N Cockpit Upgrade (complete FY12)
  - Variant of USA CH-60 CAAS cockpit upgrade

VH-71 "Kestrel" (formerly VXX)

- White House memo 26 Nov 02
  - Request accelerated acquisition
  - $1.2B added above line by OSD
- JROC approved VXX ORD 16 Dec 03
- USD (AT&L) approved ASR 17 Dec 03
- Request For Proposals released 18 Dec 03
  - Competition limited to Sikorsky (SAC) S-92 and Lockheed Martin (LMT) US-101
- USD (AT&L) approved Source Selection extension on 23 Mar 04
- SDD contract award announcement originally scheduled for 3 May 04; postponed until 17 Dec 04 & moved to 28 Jan 05
- MS B/C DAB on 13 Jan 05
- ***SDD contract awarded to LMT (US-101) on 28 Jan 05***
- IOC: FY10 (4 Increment I aircraft)
- FOC: FY15 (23 Increment II aircraft)
- Total buy: 23 Inc. II aircraft + 3 test articles = 26

PB-06 (Feb 05, $M)	Pre-Yrs	FY06	FY07	FY08	FY09	FY10	FY11
Quantity	3	5	0	3	4	3	4
RDT&E, N	720.0	936.0	561.0	619.0	371.0	220.0	85.0
APN-4	4.0	0.0	0.0	58.0	421.0	352.0	331.0
VH-3/60 Comm Suite Upgrade	26.7	6.9	5.2	2.6	4.2		
VH-60N Cockpit Upgrade	14.1	9.9	10.0	12.9	11.6	16.2	16.6
VH-3D Lift Improvement	0.0	0.0	30.0				
VH-3/60 Survivability	123.5						
Total MODS (APN-5)	**164.3**	**16.7**	**45.2**	**15.5**	**15.8**	**16.2**	**16.6**

Operational Support Airlift

USMC OSA OAG – Aug 04

- "Annual" JCS (J-4) OSA Re-basing Study underway; report due April, 2005. [Last "annual" study published 1998]

Recent Efforts

- C-20 provides OEF and OIF support
- UC-12's deploy in support of I MEF (OIF I)
- C-9's provide OIF support to I MEF
- UC-12's and C-9's provide support to MAGTF-8 (Haiti)
- UC-35 remains deployed in support of I MEF (OIF II)

The Way Ahead

- Provide continued increased levels of support to USMC TEEP, OPLAN, CONPLAN, and other "wartime readiness requirements"
- Deployability – Formalized reserve pilot augmentation and integration currently executing with deployed C-20 and C-35 dets

Future efforts

- Four UC-35Ds to be delivered in FY05; two more in FY06
- Divest four UC-12B's in FY05, and two more in FY06 to keep USMC within OSA cap
- UC-12 Replacement Aircraft ICD to JROC
- Rewrite MCO 4631.10 OSA Management

Transformational Simulators

V-22

- New River
  - Currently (FFSx3, FTD)
  - FY07 (FTD)
  - FY10 (FFS)
- Miramar
  - FY08 (FTD x2)
  - FY11 (FTDx2)
- West Pac
  - FY09 (FTD)
  - FY10 (FTD)
  - FY12 (FTD)
  - FY13 (FTD)
- Quantico
  - FY13 (FTD)
- 4th MAW
  - FY10 (FTD)
  - FY12 (FTD)
  - FY13 (FTD)

H-1Y/Z

- Pendleton
  - FY07 (AH-1Z FTD)
  - FY07 (UH-1Y FTD)
  - FY08 (UH-1Y FFS)
  - FY10 (AH-1Z FFS)
- New River
  - FY10 (UH-1Y FTD)
  - FY11 (AH-1Z FTD)
  - FY11 (UH-1Y FTD)
  - FY14 (AH-1Z FTD)
- Futenma
  - FY14 (AH-1Z FTD)
  - FY11 (UH-1Y FTD)

KC-130J

- Cherry Point
  - FY06 (WST)
- Miramar
  - FY07 (WST)
- WestPac
  - FY08 (WST)

MACCS

- ATC Tower simulation IOC FY05
- Simulation & training tool organic to CAC2S
- CAC2S Sim IOC FY07

JSF

- Location dependent on basing and FRS decision
- Lockheed-Martin has simulator contract

Simulator Master Plan

- **Marine Corps Aviation Simulation Master Plan (MCASMP) Requirement**
  - CONUS - Provide each T/M/S a section of networked simulators
  - WESTPAC & Reserve – Provide each T/M/S at least one simulator
  - MCASMP mandates a USMC common Visual Data Base, Tactical Environment Network (TEN), and common hardware when possible.
  - USMC currently has 21 MCASMP-compliant trainers fielded; 40 expected by FY09.
  - Common approach to simulation across all T/M/S makes distributed/networked simulator MAGTF and Joint training possible.
  - Initiatives underway to link MCASMP-compliant USMC trainers to the USAF Distributed Mission Operations Center (DMOC) for inclusion in future Virtual Flag exercises.
  - Currently MCASMP is taking its place in the Aviation Training System (ATS) transition and will provide the hardware backbone for this effort.
- **Goals**
  - Increased Readiness
  - Improved Flight Safety
  - Lower Costs (in APN and OM&N)
- **Legacy Upgrades**
  - (1) NASMP FA-18 simulator FY05
  - (4) simulators funded for upgrade in FY05
  - (4) NASMP FA-18 simulators FY06
  - (2) simulators funded for upgrade in FY07
  - (1) new simulator delivered in FY07
- **Cherry Point**
  - AV-8B (DAWST, RNAWST x2)
  - EA-6B (TTT, OFT)
  - KC-130 (OFT)
- **New River**
  - AH-1W (WSTX2)
  - UH-1N (APT)* Atlanta FY10
  - CH-46E (APT)
  - CH-53E (WST, APT)
  - MV-22 (FTD, FFS x3)
- **Beaufort**
  - F/A-18 (OFT, WST)
- **Pendleton**
  - AH-1W (WST, APT*) Belle Chasse FY 12
  - UH-1N (WST)
- **Miramar**
  - CH-46E (WST)
  - CH-53E (WST)
  - F/A-18 (OFT, TOFT,WTT 2 Dome)
  - KC-130 (OFT)* Ft Worth FY 06
- **Yuma**
  - AV-8B (RNAWST, NAWST)
- **Kaneohe**
  - CH-53D (OFT)
- **Futenma**
  - CH-46E (APT)
  - CH-53E (APT)
  - KC-130 (APT)* Stewart TBD
- **Iwakuni**
  - F/A-18 (TOFT, APT)
  - EA-6B (APT)
- **Atlanta**
  - F/A-18 (OFT)
  - AH-1W (APT)
- **Johnstown**
  - AH-1W (APT)
- **Ft Worth**
  - F/A-18 (OFT)
- Note * reflects simulators to be transferred to the Reserves

Weapons

- **The Program of Record adequately supports most weapons inventories**
- **Hellfire missile**
  - Inventories inadequate to meet ship-fill beginning FY05
  - Line partially funded; $6.58M, 72 msls (AF payback & DTRA funds)
  - $20M ATR for 220 Msls approved in Bridge re-programming
  - $43M in FY05 Supplemental
  - $122M requested in FY06 UPL
- **Top three concerns:**
  - Fund reconstitution of Hellfire Missiles and sustain procurement (~1000 per year) to replace combat expenditures, meet NCEA requirements and bridge inventory shortfall following PBD 753 Termination of Joint Common Missile (JCM)
  - Fund Common Defensive Weapon System to meet Acquisition Objective over FYDP

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
PANMC						
GP BOMBS	135.4	148.7	138.5	115.7	119.0	122.4
JDAM	82.6	85.1	41.3	43.7	44.5	46.1
AIRBORNE ROCKETS	35.2	15.6	37.2	37.4	38.2	39.0
MACHINE GUN AMMO	23.7	16.2	24.6	24.8	25.4	25.9
AIR EXPENDABLES CM	70.2	72.9	77.3	78.8	80.2	81.8
PRACTICE BOMBS	56.6	49.9	61.0	62.2	63.6	64.9
JATOS	4.6	4.7	4.8	4.8	4.9	5.0
WPN						
SIDEWINDER	37.8	47.7	44.3	41.0	39.3	39.6
AMRAAM	82.0	99.4	87.1	85.7	87.6	89.7
JSOW	144.9	140.0	150.5	160.9	165.1	169.6
HELLFIRE	0.0					
APN						
Common Defensive Weapon System	13.8	13.7				

CAC2S

- **IOC: FY07**
- **FOC: FY09**

Description:

- The Common Aviation Command and Control System (available in FY07) is the command and control component of the MACCS family of systems.
- CAC2S replaces six disparate legacy platforms and provides an expeditionary and common C2 platform for Marine aviation that is employable from the sea base, ashore, and in an airborne node. As a joint force C2 enabler, CAC2S will help transform EMW concepts into capabilities that will fully support joint operations.
- CAC2S is an ACAT II program and the cornerstone of the MACCS, providing aviation command posts, air defense, air support, air operations, and air traffic control capabilities.
- CAC2S provides a joint air C2 capability that is fully integrated into the joint operational architecture.

Operational Impact:

- Expeditionary: Self-deployable from the sea with organic lift.
- Scaleable: Individual Marine portable to Tactical Air Command Center in support of a major theater of war.
- Flexible: Single or Multi-function operation centers (sea based, airborne, and ground based).
- CAC2S fuses real-time/non-real-time data providing a common operational picture at every CAC2S node.

Significant Events:

- DT to begin: 2nd Qtr FY-05
- OT to begin: 2nd Qtr FY-06
- Command Element Advocate Board identified CAC2S along with C2PC as the foundation for MAGTF C2.

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N	49.6	26.1	20.3	7.0	0.3	
PMC	3.9	35.3	38.1	56.9	36.3	37.2
O&M, MC	0.0	1.8	5.5	6.3	6.5	6.7
O&M, MCR	0.0	0.8	1.6	2.4		
Total	53.5	63.9	65.5	72.6	43.1	43.9

MATCALS/ATNAVICS

- **IOC: FY06**

Description:

- MATCALS is a family of systems providing all-weather Air Traffic Control (ATC) Services for Marine, Naval, Joint, Unified, Coalition, and/or civilian aircraft during expeditionary operations ashore (from FARPS to Main Air Bases).
- ATNAVICS will replace the current precision approach radar sensors and associated C2 MATCALS sub-systems. It is designed to meet CMC and DC/A priorities for interoperability and scalability in support of EMW via increased mobility (HMMWV based) & reduced airlift requiring 2 vice 7 C-130s, and eliminating MHE requirement.

Program Update:

- Comprised of: Air Surveillance Radar, Precision Approach Radar, Radar C2 Node
- Will be procured under the existing US Army contract.

Issues:

- ATNAVICS Procurement Decision was made on 18 Jan '05.
- Marine Corps ATNAVICS Operational and Organizational Concept was approved by USMC MROC on 8 Dec '04.
- Air Traffic Navigation Integration and Control System (ATNAVICS) was selected as the material solution for the Air Surveillance Precision Approach Radar Control System (ASPARCS) due to problems in DT with the original ASPARCS candidate system.

Future Events:

- Feb '05 meeting to develop Spiral Enhancements to ATNAVICS in concert with MCCDC and US Army.
- Deliver spiral plan to Raytheon and develop cost estimates and contract modifications for planned spirals.

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
OPN	19.6	20.2	20.0	17.5	18.0	18.4
RDTE, N	4.7	0.7	0.7	0.7	0.7	0.8
O&MN (AMC & AMD)	10.6	13.7	7.1			14.2
Total	34.9	34.6	27.8	18.2	18.7	33.4

G/ATOR

Program Update:

- **IOC: FY10**
  - Increment I: 2 systems with all training and logistics support in place.
- **FOC: FY17**
  - Increment I-IV, all systems and support in place.

Description:

- 3D HMMWV mounted, short/medium range radar designed to detect low observable targets i.e, cruise missiles, ABTs, and rockets, mortars, artillery, etc. Supports Air Defense, Air Surveillance, Air Traffic Control, and Counter Battery/Target Acquisition**.**
- The system will replace legacy systems and support CLAWS/SLAMRAAM employment.
- System will be a spiral development comprised of four increments.
  - Increment I , Air Defense/ Air Surveillance
  - Increment II GWLR
  - Increment III, Advance Technology upgrades
  - Increment IV, Air Traffic Control

Acquisition:

- AAO is 63 systems
- AAO Increment I, III, IV = 41
- AAO Increment II = 22

Issues:

- FY06 and FY07 funding levels limit staffing at program office and contractor facilities.
- Further reductions in funding will require alternatives to keep legacy systems mission ready.

Future Events:

- RPF released Apr 05
- MS B in Jun 05
- Joint venture with Army and Navy likely
  - MOU with USA and Missile Defense in staffing

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N	18.901	32.9	91.3	77.9	33.9	42.0
PMC				44.0	102.7	111.7
OM, MC					3.3	4.2
Total	18.9	32.9	91.3	121.9	139.9	157.9

AN/TPS-59 / HELRASR

- **IOC: FY12**
  - (1) system with training and logistics support in place.
- **FOC: FY17**
  - 11 systems fielded, all training and support in place.

Description:

- The AN/TPS-59 is the primary sensor in the MACCS; it was fielded in 1984 and upgraded in 1996 (TBM capability). Post production support efforts keep radar viable against threats.
- The HELRASR is a mobility replacement effort which will provide the next generation long range radar capability beyond FY30. It is a one-for-one replacement of the AN/TPS 59 radar**.**
- Provides the MAGTF with airspace surveillance of Air Breathing Targets (ABTs) & the **only** Tactical Ballistic Missile (TBM) surveillance capability.
- As part of CEC network, will provide cueing and situational awareness updates to GATOR and CLAWS/SLAMRAAM.

Program Update:

- MS A achieved FY03

Issues:

- FY06 and FY07 un-funded
- FY05 funding being traded and spread across FY05-FY07 to achieve FY08 MS B

Future Events:

- PR07 issue to shift HELRASR funding one year to the right.
- MS B planned for FY08

PB-06 (Feb 06, $M)	FY06	FY07	FY08	FY09	FY10	FY11
TPS-59 RDT&E	2.5	8.6	5.1	5.1	5.5	2.3
TPS-59 PMC	5.6	6.9	6.2	6.4	4.8	2.7
TPS-59 O&M	1.7	2.0	1.9	1.6	1.6	1.6
HELRASR RDT&E			7.7	36.9	27.9	20.4
Total Funding	9.9	17.4	20.8	50.0	39.8	27.0

Composite Tracking Network

- **IOC: FY09**
- **FOC: FY11**

Description:

– CTN is the adaptation of the USN Cooperative Engagement Capability modified for Marine Corps use to distribute composite tracking data and fire control data to C2, sensors, and weapons.

– CTN will contribute to real-time situational awareness

– CTN directly supports OSD directed CEC/SIAP architecture

– CTN is an essential element of USMC future C4I architecture

Current Initiative:

– CTN is teaming with USN CEC PEO on a P3I effort for next generation hardware as well as development and procurement of CTN components.

Operational Impact:

–CTN will provide the ACE Commander and the MACCS with a seamless flow of networked sensor data that supports both air control and air defense missions in MAGTF, Naval, and Joint operations.

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E, N	6.5	1.8	5.7	8.4	20.2	24.2
PMC		2.5	7.5	17.6	24.2	27.5
O&MMC, O&MMCR	1.2	1.5	3.0	5.2	4.8	5.5
Total	7.7	5.8	16.2	31.3	49.3	57.2

CLAWS / SLAMRAAM

- **IOC: FY06**
- **FOC: FY15**

Description:

– CLAWS is a rapidly deployable, mobile, all-weather, standoff air defense weapons system designed to defend the MAGTF and Naval forces from attack by cruise missiles, fixed & rotary wing aircraft, and UAVs.

– CLAWS consists of launcher integrated with the Advanced Medium Range Air-toAir Missile (AMRAAM) on a HMMWV platform.

– CLAWS program is teaming with the Army on a Joint Acquisition Strategy for Increment I (SLAMRAAM).

Current Status:

– CLAWS Block 0 is in developmental testing and will complete initial IOT&E in FY 06.

Operational Impact:

– CLAWS Increment 0 fields in FY06 and will consist of:
  - Sentinel Radar
  - ADCP(EP)
  - 4 CLAWS Launcher vehicles.

– SLAMRAAM fields in FY10 and will consist of:
  - GATOR
  - CAC2S
  - Modified CLAWS launcher vehicles

AAO: 65 launchers

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E,N	3.1	4.1	8.3	1.8	1.6	1.4
PMC	0.442	3.1	2.3	16.8	23.7	19.4
O&MMC	1.3	1.8	4.5	5.8	5.9	8.0
Total	4.8	9.0	15.1	24.4	31.2	28.9

GBAD Transformation

IOC: FY07

- Phase I – FY 05/06:
  - Avengers removed from inventory
  - Field HMMWV with crew served weapon & MANPAD Stingers
- Phase II – FY 08/09:
  - Integrated sensor/C2 (CAC2S) package
- Phase III – FY 10-12:
  - Development of Multi-role weapon to engage both air and ground targets

FOC: TBD

Description:

- Development of ground based force protection capability within the MAW.
- Transition from Avenger/Stinger MANPADS to Ground Based Air Defense (Future)
- Development of true, multi-role weapon capability able to engage ground and air targets.
- Program also includes life-cycle sustainment of existing GBAD equipment.
- Stinger Missile inventory due to expire and no replacement missile currently funded.
- Planned inventory objective is 188 Systems

Operational Impact:

- Will enhance GBAD role in Force Protection while retaining capabilities against airborne threats (UAVs, FW & RW aircraft)

PB-06 (Feb 05, $M)	FY06	FY07	FY08	FY09	FY10	FY11
RDT&E	9.6	8.1	4.5	4.6	4.0	4.5
PMC	2.0	3.8	9.8	17.1	17.2	20.0
O&M	1.4	1.7	2.2	2.9	3.0	2.5
Total	13.0	13.6	16.5	24.6	24.3	27.0

Aviation C2 TTF

TTF Charter: 14 Nov 02

TTF Conference:

- Last: March 05
- Next: TBD

CFT I: Doctrine & Training

- Received AC2 FoS COE Coordinating draft (Jan 05)
- GBAD ICD draft (May 05)
- AC2 Functional Concept coordinating draft (Jun 05)
- CLAWS TTP document (MCRP 3-25-10J) in coordinating draft

CFT II: Organization & Personnel

- Completed
  - MACCS-X ODT TOCR staffing/troop list submission (Dec 04)
- On-going
  - Identify ADSW/IRR fills for MACCS-X ODT (Feb 05)
  - MACCS-X ODT Phase 2 reevaluating (FY 06)
  - Developing POA&M COA's for Organization & Personnel
  - CLAWS unit/LAAD Bn T/O to reflect Force Protection mission (Jun 05)

CFT III: Material & Facilities

- Identify MACCS-X ODT facility (Feb 05)
- CAC2S Developmental Test support (Aug 05)
- Define Concept of organic logistics & mobility support (Jun 05)
- Review Business Case Analysis results for CAC2S (Dec 05)

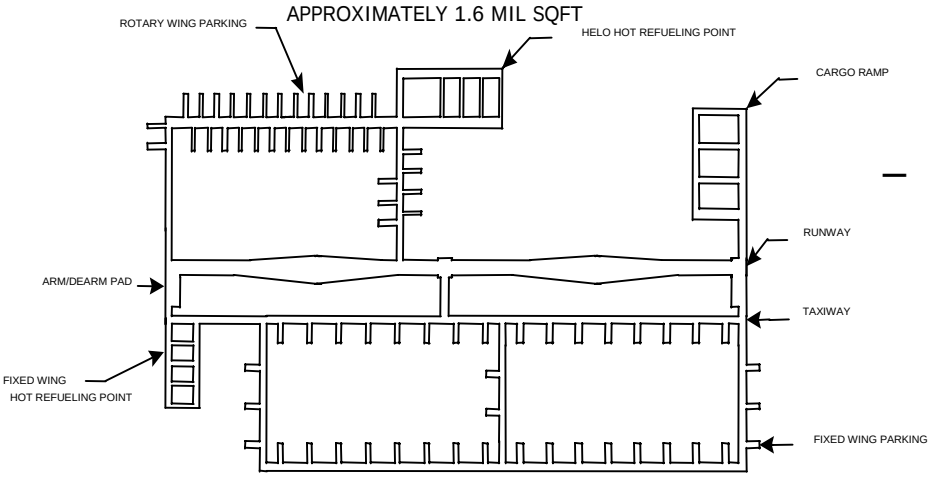
CFT & WIPT meetings:

- **CFT-II 8 Feb 05**
- **CFT-I 15-16 Feb 05**

- **Upcoming TTF Decisions:**
- Common operator training (May 05)
- MACCS-X ODT Phase II plan (Jun 05)
- MROC information brief on AC2 concepts/JCIDS documents Mar 05
- **Issue:** Study requested by DC Aviation to define Marine Corps role in anti-air warfare did not receive funding
  - TTF continues to pursue funding opportunities

EAF 2000

- **Six Total EAF 2000s**
  - 3 on MPF, 3 Stored
- **Local EAF Training Sites**
  - 1st MAW - Ie Shima & VTOL Pads
  - 2nd MAW - MCALF Bogue & VTOL Pads
  - 3rd MAW - 29 Palms, Red Beach, Aux II and others



- **EAF 2000 Capabilities**
  - 3,850 ft runway and parallel taxiway
  - 3 sets of arresting gear
  - Visual Landing Aid and lighting systems
  - Hot refueling pits
  - 78 parking spaces
    - 75 Tactical aircraft (fixed and rotary wing)
    - 3 transport aircraft (KC-130)
  - Supports Joint operations
    - All Naval TacAir jets, transports, and assault support acft
    - C-17 capable

Future Efforts (not in the POM):

1. Extreme lightweight mat for helo operations.
2. Lightweight mat to augment/replace AM-2.
3. High Heat resistant mat for supporting JSF.
4. Improved EAF Lighting

PB-06 (Feb 05), $M	FY06	FY07	FY08	FY09	FY10	FY11
OPN-3						
Expeditionary Airfields	7.8	8.0	8.1	8.3	8.5	8.6
Total Mods	7.8	8.0	8.1	8.3	8.5	8.6

Joint Mission Planning System

- **IOC: FY06**
- **FOC: FY08**
- **Description**
  - The Joint Mission Planning System will serve as the single source mission planning hardware/software for all USMC Fixed, Rotary and unmanned Aviation platforms. It will entail approximately 20 common capabilities modules such as route planning, sensor predictions, EW, and Intel Planning.
  - Each specific platform (FA-18, EA-6B, etc) will provide its own Unique Planning Component which will interface with the JMPS architecture.
  - The first spiral is driven to replace the Tactical Aviation Mission Planning System (TAMPS) for the FA-18, as well as replace mission planning systems for the AV-8B and EA-6B.
  - The second spiral will have the USAF acting as the lead agent to replace mission planning tools with the F-15.
  - Subsequent spirals will address rotary wing, transport, and non-aviation assets.
- **Operational Impact**
  - OpEval is scheduled for the 2nd Qtr FY-05. The EA-6B, FA-18, and AV-8B will transition to JMPS the 1st Qtr of FY-06 with rotary wing platforms transition beginning in FY07.

Joint Close Air Support

- **JCAS ESC Update:**
  - JTAC MOA-Signed
  - FAC(A) MOA-Signed
  - JTAC Simulation- Multi-purpose Supporting Arms Trainer (MSAT) and SOF Air Ground Interface Simulator (SAGIS) scheduled for delivery in FY05.
- **Universal Ground Spotter (UGS) Status**
  - Sea Viking 06 UGS experiment underway
- **Joint Efforts**
  - TACP Equipment commonality
  - Joint Effects Targeting System (JETS)
    - ICD in Staffing
    - Delivery FY10-12
- **USMC JTAC Status**
  - TACP T&R Signed
  - USMC JTAC Policy message released.
  - Non-Aviator training underway.
- **TLDHS Status**

  Block I – Fielded

  Block II
  - Transition to new computer
  - SATCOM protocol
  - AFATDS interoperable
  - C2PC injector
  - DPSS Precision targeting capability.
  - F-16, F-18, AV-8B
  - LRIP May 05
  - Formal OT 2Q. FY06
  - Field 3Q FY06

TACMAN & NTTP

T/M/S	Current TACMAN	NTTP Conf
CH-46E	Dec 05	Jan 06
CH-53D/E	Aug 97	Jul 04
AH-1W	Dec 03	Jan 05
AH-1Z	----	TBD
UH-1N	Jun 03	Jan 05
UH-1Y	----	TBD
MV-22	----	Jan 05
KC-130F/R/T	May 97	Nov 03
KC-130J	----	TBD
F/A-18 A-D	Nov 02 (S)	Jun 04
AV-8B	Apr 96	Dec 03
EA-6B	Nov 03	May 05

- **ALL** current Marine Corps aviation communities have completed their Air NTTP conferences (MV-22 **included**).
- Rotary Wing communities will receive a single, common CLASSIFIED Air NTTP Summer (05).
- The JSF does not have a T&R or NTTP in draft at this time. The JSF JPO is working on a draft Joint System Training Plan (JSTP) for the FRS that will be the genesis for a future T&R and a Concept of Employment document that will be the genesis for a future Air NTTP.
- The HMLA Community recently completed their second conference this past January. Their conference ran concurrently with the MV-22 initial conference.
- The CH-46 Community's manuals have completed shipping.
- The CH-53 and KC-130 TPGs have been completed and mailed to DAPS for reproduction.
- The AV-8 pubs are in the editing cycle and are expected to hit the fleet late Spring 05.
- The F/A-18 community's manuals are expected to be released in the fall of 05.

T&R Manuals

T&R Manual	MCO/SSIC	Date	Next Conference
Program Manual	P3500.14H	18 March 04 Interim: Mar 05	Mar 07
F/A-18	3500.46	10 Sep 04	Sep 07
AV-8B	3500.31	24 Sep 04	Sep 07
KC-130 F/R/T	P3500.47	Interim approved in use 23 Sep 04	Sep 07
MV-22	P3500.34A	7 Nov 03	Nov 06
TACP	P3500.37	Interim approved in use 1 Feb 05	TBD
EA-6B	P3500.45A	Interim approved in use 11 Feb 05	TBD
AH-1W	3500.48	6 Jan 05	TBD
UH-1N	P3500.49A	6 Jan 05	TBD
CH-46	P3500.50A	P3500.50A Interim in use 3 Aug 04	May 05
CH-53	P3500.51	P3500.51A Interim in use 3 Aug 04	May 05
KC-130J	P3500.73	Interim approved in use 21 Sep 04	TBD
C-9	P3500.17	Aug 04 –draft in staffing	TBD
UC-12	P3500.17	Aug 04 –draft in staffing	TBD
HH-46 SAR	P3500.17	Aug 04 –draft in staffing	TBD
UH-1N SAR	P3500.17	14 Aug 96	Due
UC-35	P3500.63A	6 Apr 03	Apr 06
UC-20	P3500.64	4 Apr 02	Apr 05
F-5	P3500.65	23 Jul 01	Due

T&R Manuals

MACCS & Aviation Ground

T&R Manual	MCO/SSIC	Date	Next Conference
TACC	P3500.53	Interim in Staffing	TBD
TAOC	P3500.54	Interim in Staffing	TBD
MATC	P3500.55	16 Jun 03	Oct 06
DASC	P3500.56	NA	TBD
LAAD	P3500.57	09 Dec 02	Jan 06
UAV	P3500.58	NA	TBD
METOC	P3500.66	11 Jun 04	Held 18-22 Jan 05
AES	P3500.67	02 Mar 04	Mar 07
Airfield Ops	P3500.71	15 Sep 04	Sep 07

- Organization of T&R manuals have historically been grouped by aircraft type into volumes/aviation ground function. Admin instructions were known as Volume 1, fixed wing aircraft were compiled in Volume 2, rotary wing aircraft in Volume 3, etc. As of July 01 T&R manuals are being written as individual Marine Corps Orders for each T/M/S and aviation ground T&R.
- Aviation Training Branch (ATB) at TECOM manages the T&R manuals.
- T&R manuals link: <http://www.tecom.usmc.mil/atb/documents-T&R.htm >
- Work continues to develop, test, and implement a training level (T-Level) readiness reporting method that replaces the present T-level evaluation metric (CRP/Event completion) with a core model-based, automated method focused on Unit capabilities (Core Skill Proficiency/Combat Leadership/Unit Proficiency). The automated calculation will provide input into the USMC SORTS reporting procedures for T-Level only.

Aviation Studies/Concepts

- **Concepts & Visions Influencing Marine Aviation**
  - Operational Maneuver from the Sea (OMFTS) (4 Jan 96)
  - The MAGTF in Sustained Operations Ashore (4 Jan 96)
  - Ship-to-Objective Maneuver (STOM) (25 Jul 97)
  - MAGTF Aviation and OMFTS (1 Jan 99)
  - Expeditionary Maneuver Warfare (10 Nov 01)
  - Sea Power 21 (Summer 02)
  - Marine Aviation Transformation Roadmap (Aug 03)
  - Naval Transformation Roadmap (Nov 03)
  - EMW Capabilities List (Spring 05)

- **Studies In-Work**
  - Joint Operational Support Airlift Capabilities Study (Apr 05)
  - MAGTF Integrity (Spring 05)
  - 2015 Baseline MEB (Spring 05)
  - Future Aviation Basing (Spring 05)
  - JSF EW variant study (Spring 05)
  - Integrated Air and Missile Defense Joint Integrating Concept Capabilities Based Assessment (Jun 05)

- **Future Studies**
  - Marine Aviation Logistics Squadron – Future (TBD)
  - DoN Sea Basing Requirements Study (DSRS) (TBD)
  - AAW Mission Area Analysis (TBD)

- **Completed Studies**
  - Overarching Rotorcraft Requirements Assessments (00)
  - Marine Aviation Requirements Study (MARS) (01)
  - MARS Follow-On Assault Spt Analysis (01)
  - V-22 Return to Flight Analysis (02)
  - Operational Support Airlift Study (Feb 03)
  - GAO Military Readiness (CAS) (May 03)
  - Effects Based Operations – Rand (Jan 03)
  - Integrated Amphibious Operations Update Study (Apr 02)
  - Future GCE Cmdr CAS Needs - Rand (Jan 03)
  - Joint Forcible Entry Operations (Aug 03)
  - Non Fixed-Wing Aviation (Sep 03)
  - Expeditionary Airfield (EAF) Study (Apr 04)
  - METOC Support to the MAGTF (May 04)
  - JTAC Requirements & Cost Analysis (Apr 04)
  - Cumulative Impacts on Aviation Transitions (Jul 04)
  - KC-130 Requirements (Mar 05)

Marine POCs

OSD

USD AT&L: Col George Sanchez
Transformation: Col Eric Van Camp
DOT&E: Col Russ Jones

SECNAV

DASN Air: Mr. Craig McVay
OLA (MC-Auth): LtCol Mark Laviolette

HQMC OLA

EA: Col Chris O'Connor
AVN AO: LtCol Jamie Cox

NAVAIR

PAX MAD: Col Martinez
V-22 DPM: Col Bill Taylor
H-1 PM: Col Keith Birkholz
KC-130 DPM: Maj John Albers
AV-8 PM: Col Dave Hines
CH-53 PM: Col Paul Croisetiere
VXX PM: Col Frank Mazur
CH-46 PM: LtCol Mitch Bauman
JSF JPO: Col Pat Greene
EA-6B AO: LtCol Bill Lang
Weapons PMA-242: CAPT Mark Converse
Weapons PMA-201: CAPT David Dunaway

OPNAV

N-70: LtCol Standard
N-75: LtCol Fulwiler
N-780F: Col Brad Lindberg
N-80: LtCol Zaorski

P&R

RPB: Col Webster
RPD: Col Sonntag

PP&O

Ops: Col Doug Stillwell
SIG: Col Jim Trahan

MCCDC

TFS: Maj Phillip Colborn
EFDC: Col Hanefin

TECOM

ATB: Col Donovan
MAWTS-1: Col Davis

HQMC AVN

EA: Col Cos Spofford
APP: Col Bob Brady
APW: Col Ken Best
ASM: Col Cos Spofford
ASL: Col Pierre Garant
APC: Col Ron McFarland

Acronym List

ABT – Air Breathing Targets
ACAT – Acquisition Category
ADM – Acquisition Decision Memorandum
AEA – Airborne Electronic Attack
AMP – Avionics Modernization Program [C-130]
AoA – Analysis of Alternatives
ASE – Aircraft Survivability Equipment
ASPARCS – Air Surveillance and Precision Approach and Radar Control System
ATARS – Advanced Tactical Airborne Reconnaissance System [F/A-18D]
ATB – Aviation Training Branch
ATNAVICS – Air Traffic Navigation, Integration, and Coordination System
ATR – Above Threshold Reprogramming
AVN – Aviation [HQMC Aviation Department]
AVPLAN – Aviation Plan
BTR – Below Threshold Reprogramming
C2PC – Command and Control Personal Computer
CAC2S – Common Aviation Command and Control System
CDD – Capability Development Document
CEC – Cooperative Engagement Capability [USN]
CFT – Cross-Functional Team
CLAWS – Complimentary Low Altitude Weapons System
CTN – Composite Tracking Network
DC/A – Deputy Commandant for Aviation
EAF – Expeditionary Airfield
ECP – Engineering Change Proposal
EFDC – Expeditionary Force Development Center
EIS – Environmental Impact Statement
EMD – Engineering and Manufacturing Development
EMW – Expeditionary Maneuver Warfare
ERIP – Engine Reliability Improvement Program [CH-46E]
FHP – Flight Hour Program
FOC – Full Operational Capability
FRS – Fleet Replacement Squadron
FYDP – Future Years Defense Plan
G/ATOR – Ground/Air Task Oriented Radar System
GBAD – Ground Based Air Defense
HAC – House Appropriations Committee
HELRASR - Highly Expeditionary Long Range Air Surveillance Radar
HLR – Heavy Lift Replacement
HNVS – Helicopter Night Vision System [CH-53E]
ICD – Initial Capabilities Document
IMDS – Integrated Mechanical Diagnostics System [CH-53E]
IOC – Initial Operational Capability
ITT – Integrated Test Team [V-22]
JCAS – Joint Close Air Support
JHMCS – Joint Helmet Mounted Cueing System
JMPS – Joint Mission Planning System
JROC – Joint Requirements Oversight Council
JSF – Joint Strike Fighter
JTAC – Joint Terminal Attack Controller
KPP – Key Performance Parameter
MACCS – Marine Air Command and Control System
MACP – Marine Aviation Campaign Plan
MATCALS – Marine Air Traffic Control and Landing System
MCAVSMP – Marine Corps Aviation Simulation Master Plan
MCCDC – Marine Corps Combat Development Command
MIDS - Multifunctional Information Distribution System
MOA – Memorandum of Agreement
MOA – Memorandum of Understanding
MROC – Marine Requirements Oversight Council
MYP – Multi-Year Procurement
NTTP – Naval Tactics, Techniques, and Procedures
OLA – Office of Legislative Affairs [USMC]
OPEVAL – Operational Evaluation
ORD – Operational Requirements Document
OSA – Operational Support Airlift
OSCAR – Open Systems Core Avionics Requirement [AV-8B]
OSIP – Operational Safety Improvement Program
OWP – Outer Wing Panels [EA-6B]
PAA – Primary Aircraft Authorized
POA&M – Plan Of Action & Milestones
POM – Program Objective Memorandum
RMWS – Ramp Mounted Weapon System [CH-53E]
SDD – System Development and Demonstration
SLAMRAAM - Surfaced-Launched Advanced Medium Range Air-to-Air Missile
STOM – Ship To Objective Maneuver
STOVL – Short Takeoff/ Vertical Landing
TBM – Tactical Ballistic Missile
TECOM – Training and Education Command
TFS – Total Force Structure
TLDHS – Target Location Designation Handoff System
TTF – Transition Task Force
VUAV – Vertical Unmanned Aerial Vehicle

Next Update

October 2005

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HQMC, Aviation Plans, Policies, Programs & Budgets Section (APP-2)

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